WATER QUALITY PLANNING BUREAU EDITORIAL GUIDE

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ACRONYM LIST

DEQ	Department of Environmental Quality (Montana)
EPA	Environmental Protection Agency (US)
GIS	Geographic Information System
GPO	General Printing Office
GPS	Global Positioning System
NIST	National Institute of Standards and Technology
TMDL	Total Maximum Daily Load
USFS	United States Forest Service
USGS	United States Geological Survey
WPB	Water Protection Bureau (DEQ)
WQPB	Water Quality Planning Bureau (DEQ)
WQS	Water Quality Standards

1.0 INTRODUCTION

This Editorial Guide describes the general guidelines for word usage and grammar for Water Quality Planning Bureau (WQPB) documents. Following is guidance on spelling, abbreviations and acronyms, punctuation, numbers, units of measure, signs and symbols, as well as general grammar rules and writing tips targeting common traits found in WQPB documents. Consistency in these style aspects will help readers concentrate on the content without being distracted by variations in word usage.

2.0 ABBREVIATIONS & ACRONYMS

2.1 ABBREVIATIONS

Always spell out *United States* when it appears as a noun. Use *U.S.* as an adjective. Do not use the periods when using *US* in an acronym.

> The United States gained its independence from Britain.
> The U.S. Forest Service manages all national forest lands.
> *But*: USFS as an acronym, never U.S. FS

Abbreviate compass points in uppercase letters when standing alone or when used in conjunction with numbers; e.g., Fourth Street SW. Otherwise, compound compass points are closed, not hyphenated.

> southwest *but* south-southwest

Refer to the AP Stylebook for rules on abbreviation under the entry in question. If there is no guidance, refer to the GPO Style Manual online. (http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2008_style_manual&docid=f:chapter9.pdf)

In all cases, abbreviate proper names according to that entity's preferred style.

2.2 ACRONYMS

In general use acronyms sparingly to avoid your document's becoming alphabet soup.

Upon first reference, spell out the whole term and put the acronym in parentheses immediately following the term. Even if the acronym is a common one (e.g., USGS or EPA), spell it out on first reference then refer to it by its acronym on subsequent references.

There is no need to put an acronym in parentheses following the term if the term will not be used again in the document.

DEQ recommends spelling out terms and reintroducing their acronyms upon first reference *in each new section of a report* in case readers refer to only certain sections of the report.

3.0 GENERAL GRAMMAR USAGE

3.1 AGREEMENT OF PRONOUN/ANTECEDENT, SUBJECT/VERB

Pronoun/Antecedent

Where "they" is the pronoun and "one" is the antecedent.

> **Incorrect:** If one doesn't like the report, they should rewrite it.
> **Correct:** If one doesn't like the report, he should rewrite it.

Subject/Verb

Singular subjects connected by *or* or *nor* take a singular verb.

> **Incorrect:** Either the crew leader or the project manager are present at every meeting.
> **Correct:** Either the crew leader or the project manager is present at every meeting.

> **Incorrect:** Neither the crew leader nor the project manager like the findings.
> **Correct:** Neither the crew leader nor the project manager likes the findings.

When one subject is plural and the other is singular, put the singular first, followed by the plural and use the plural verb.

> **Incorrect:** Neither the ranchers nor the project manager are satisfied with the findings.
> **Incorrect:** Neither the ranchers nor the project manager is satisfied with the findings.
> **Correct:** Neither the project manager nor the ranchers are satisfied with the findings.

Single ideas or expressions take single verbs; plural subjects take plural verbs.

> **Incorrect:** Our managers and crew is the best in their field.
> **Correct:** Our managers and crew are the best in their field.

> **Incorrect:** The manager's friend and advisor recommend he implement the plan carefully.
> **Correct:** The manager's friend and advisor recommends he implement the plan carefully. (*friend and advisor* refers to the same person; therefore, it is singular)

Verbs always agree with their subject.

> **Incorrect:** The list of polluted streams are long and disturbing.
> **Correct:** The list of polluted streams is long and disturbing.

The decision to use *he* or *she* when referring to a non-specific person is a personal one. Although it's acceptable to use either *he* or *she* throughout a single piece of writing, and also to use both (i.e., switching them out), editors don't recommend it for various reasons. Further, using *he or she* as a single phrase is clunky and awkward. If possible, make your subject plural to avoid confusion:

Okay: Whichever project manager implements this plan, he [or use *she*] must follow it carefully. (To say, "…they must follow it…" is incorrect because *project manager* is singular.)

Okay: Whichever project manager implements this plan, s/he must follow it carefully.

Clunky: Whichever project manager implements this plan, he or she must follow it carefully.

Better: Whoever the project managers are, they must implement this plan carefully.

Subjects modified by *each* and *every* take singular verbs:

Each river in the region has a name.
Every river in the state has a name.

Collective nouns name a group of persons, things, or animals. Depending on how they are used, collective nous are either singular or plural; singular if the noun denotes the group acting as an individual; plural if the noun denotes individuals that make up the group:

The committee has agreed to approve the new style manual. (as a whole they've agreed)
The committee have disagreed on some of their own inclusions for the manual. (they disagree among themselves individually)

When the field crew has finished its work, it will prepare a report.
The field crew were not satisfied with their work, so their report will be delayed.

3.2 DANGLING PARTICIPLES

A verb ending in *ing* and acting as an adjective is called a present participle (*ing* words are called gerunds only when used as nouns). A participle dangles when it is attached to the wrong subject.

Incorrect: More pollutants were discovered while testing the water samples. (implies the pollutants were doing the testing)
Correct: The lab tech discovered more pollutants while testing the water samples.

Incorrect: Driving south, the stream opens out onto the plains. (implies the stream is driving)
Correct: Driving south, we discovered that the stream opens out onto the plains.
Correct: Flowing south, the stream opens out onto the plains.
Better: As it flows south, the stream opens out onto the plains.

3.3 WHO VS. WHOM

Who is a pronoun and takes a verb. *Whom* is an object of the verb.

Whom do you recommend for the job?
Who is the best candidate for the job?
Who, in your opinion, is the best person for the job?
Whom do you think is the best person for the job?

3.4 ADJECTIVAL NOUN STRINGS

Noun strings are groups of words (nouns) sandwiched together and used as adjectives to modify one noun: the last in the string. This is a common problem in technical writing and **should be avoided at all costs**. Noun strings cripple sentences; they force readers to stop and re-read. In the worst cases noun strings render sentences incomprehensible. Control your writing by eliminating non-essential words or by using more prepositions and articles to clarify the relationships among the words.

> **Whoa!:** Montana's surface water use classification system
> **Go:** Montana's system for classifying surface water use
> **Better yet:** Montana's system for classifying the use of surface waters

> **Whoa!:** The resulting TMDL development priority status for all pollutants on the 303(d) list is reported in Appendix B.
> **Is this what the author means?:** Appendix B includes the status of pollutants on the 303(d) list and their priority in developing TMDLs.

Although shorter sentences are often more desirable, remember: *clarity always trumps brevity*. What good is your prose if readers must work hard to get it, or worse, don't understand it at all? Even as a section header, *The Process for Prioritizing TMDLs* sounds better than *TMDL Prioritization Process*.

3.5 ADVERBS

Adverbs describe, qualify, limit, or modify verbs, adjectives, or other adverbs (examples include really, very, only, quickly, rudely, sooner, hardly, etc.). Many adverbs are easily recognized because they end in *–ly*; but not all do.

Note: The placement of an adverb can entirely change the meaning of a sentence. Place it as near as possible to the word it modifies. Compare the following two sentences:

> The field crew nearly lost all of their equipment. (they almost lost it but didn't lose any)
> The field crew lost nearly all of their equipment. (they lost most of it but not all of it)

One of the most common writing errors is putting the adverb *only* in the wrong place.

> **Incorrect:** We only have three days left to finish the project.

> **Correct:** We have only three days left to finish the project.

When the adverb modifies the entire sentence, place it first.

> Fortunately, we found the whole process to be easy.

With a compound verb, put the adverb between the parts of the compound.

> **Correct:** The project manager will undoubtedly like our work.

3.6 PREPOSITIONS

A preposition links an object to other words or phrases to show the relationship between them. Most people know prepositions as "placement" words (e.g., on, over, above, below, inside, outside, etc.). The list is much longer and includes words such as with/without, by, as, of, since, despite, except, etc.

As with adverbs, prepositions should be placed as near as possible to the words they modify.

Ignore the rule you learned in school that ending a sentence with a preposition is wrong. The Chicago Manual of Style calls that rule "an ill-founded superstition." Winston Churchill more eloquently stated his feelings about it: "That is the type of arrant pedantry up with which I will not put." So go ahead, end sentences with prepositions when appropriate.

3.7 PASSIVE VS. ACTIVE VOICE

Use the active voice as much as possible and include an identifiable subject. Passive sentences often obscure responsibility (e.g., *a report was compiled* doesn't indicate who wrote it). Active sentences are strong, clear, simple, and credible.

> **Passive:** An emergency meeting was called by DEQ to address pollution problems.
> **Active:** DEQ called an emergency meeting to address pollution problems.

The passive voice is okay when the doer is either not important or unknown. As long as the meaning is clear, you may use the passive voice, but do so sparingly and with caution.

> The first water samples were collected in 1962.
> It was found that arsenic contaminates many of the streams around Butte.

3.8 ITALICS

If using italics for emphasis, do so sparingly. Reserve italics for scientific names, legal citations (when style dictates), and for foreign words not commonly recognized in the English language.

Internet websites and e-mail addresses should be set in regular typeface and not italics.

Latin Terms

In non-legal work *ante*, *post*, *infra*, and *supra* are italicized only when part of a legal citation. Otherwise these terms, as well as the abbreviations id., ibid., op. cit., et seq., etc., are printed in regular typeface.

Scientific Names

The scientific names of genera, subgenera, species, and subspecies (or plant varieties) are italicized but set in regular typeface within italic matter. The names of groups of higher rank than genera (phyla, classes, orders, families, tribes, etc.) are printed in regular typeface. Also, genus is always capitalized, while species is always lowercase.

> Black bears (*Ursus americanus*) are prevalent in the Bitterroot National Forest.

See the International Code of Botanical Nomenclature (http://ibot.sav.sk/icbn/main.htm) and the International Code of Zoological Nomenclature (http://www.nhm.ac.uk/hosted-sites/iczn/code/) for details on convention and the proper scientific names of plants and animals, respectively.

Letter Designations

Letter designations in mathematical and scientific matter, except chemical symbols, are italicized.

Letter symbols used in legends for illustrations, drawings, etc., or in text as references to such material, are set in italics without periods and are capitalized if so shown in copy.

Letters (a), (b), (c), etc., and a, b, c, etc., used to indicate sections or paragraphs, are italicized in general work but not in laws and other legal documents.

3.9 CAPITALIZATION RULES

Some companies and organizations prefer to capitalize words such as *Bureau* or *Company* when referring to themselves. Though these words are not normally capitalized unless part of a proper name, it is acceptable to capitalize them when referring to the entity in question, e.g., Bureau as short for the Water Quality Planning Bureau. However, avoid excessive capitalization, which is distracting.

Proper Nouns

A common noun or adjective that is part of a proper name is capitalized; used alone as a substitute for the name of a place or thing, the common noun is not capitalized.

> Flathead River *but* the river in subsequent references (not the River); similarly for lakes, streams, valleys, mountains, bays, and other topographical references.

Basin is generally not capitalized (e.g., Flathead basin), nor is watershed (Flathead River watershed)

Valley is typically not capitalized unless it is part of the proper name (e.g., Flathead Valley) *but* Flathead River valley.

> Glacier and Yellowstone national parks *but* Glacier National Park and Yellowstone National Park, the national park(s)
>
> Flathead and Bitterroot rivers *but* Flathead River and Bitterroot River or the Rivers Flathead and Bitterroot
>
> Scapegoat Mountain and Big Baldy Mountain *but* the mountain(s); Mounts Scapegoat and Big Baldy (same with the word *peak*: Peaks Granite and Meadow *but* Granite and Meadow peaks)

National parks is not an official name, so it should be lowercase; *but* Yellowstone National Park *or* the National Park Service are uppercase.

Regions, "State of" References

Directional names denoting a region are lowercase.

> western Montana

Also, refer to the U.S. Board of Geographic Names (http://geonames.usgs.gov)

State and *city* are always lowercase. Never State of Montana *but* "the State" is acceptable when distinguishing Montana in legal documents in the same way "Contractor" is capitalized to refer to the entity specifically contracted to do designated work.

> the city of Helena
> the state of Montana
> Montana state (Montana State if referring to the university)
> Montana state law
> the state's Integrated Water Quality Report

Personnel & Job Titles

As per AP Stylebook, in general capitalize formal titles only when used directly before that person's name. Lowercase and spell out titles when used without an individual's name.

> The president will give his State of the Union address in January.
> Once a peanut farmer, former President Jimmy Carter came from humble roots.
>
> The governor of Montana, Brian Schweitzer, declared every Friday a holiday for all state employees.
> *But* I wish Governor Brian Schweitzer would declare every Friday a holiday for all state employees.

Titles can also be capitalized when used to directly address the person with that title.

> I would have done it, Captain, but the ship was sinking.
> *But* I told the captain I would have done it had the ship not been sinking.

Occupational titles are not formal titles and are not capitalized.

> **Incorrect:** The Project Manager will assign duties to team members next week.
> **Correct:** The project manager will assign duties to team members next week.

As a courtesy, capitalize titles of known persons even when their title follows the name.

> Richard Opper, Director of the Montana Department of Environmental Quality

If the title is far removed from the name, or used independently of the name, do not capitalize it.

> In an interview today, the director of the Montana Department of Environmental Quality said that he had discussed the governor's plans to increase the number of department employees.

Other

Always capitalize the first letter of a genus but lowercase the species.

Douglas-fir (*Pseudotsuga menziesii*) is the predominant species in this habitat type.

Do not capitalize seasons unless they are part of a proper noun (rare cases).

Field monitoring begins in the spring.

Capitalize items such as Table 4, Appendix C, Section 3.2, etc.

4.0 GENERAL PUNCTUATION & TREATMENT OF WORDS

Note: In some cases the Chicago Manual of Style, 16th ed., and the Associated Press (AP) Stylebook differ in their treatment of certain styles, particularly on the use of the apostrophe to denote possessives and plurals, as well as on a few other points below. You might have learned, therefore, one "correct" way to use an apostrophe only to see that this style manual instructs otherwise. When in doubt, or when not specified herein, follow AP style. Below are some of the more common rules.

4.1 APOSTROPHES

Use apostrophes to show possession or contraction but not plurals (see exceptions below).

> **Incorrect:** Some of DEQ's reports include SOP's, QAPP's, and SAP's.
> **Correct:** Some of DEQ's reports include SOPs, QAPPs, and SAPs.

> **Incorrect:** During the 1990's, our research team uncovered many errors.
> **Correct:** During the 1990s, our research team uncovered many errors.
> **Correct:** DEQ filed that report in '96, but nobody read it.

In some cases (where its omission might confuse, or with single letters) an apostrophe is used to denote the plural.

> **Incorrect:** Students who earn As and Bs will do well on the test. (*As* is also a word and can stump readers in such a case.)
> **Correct:** Students who earn A's and B's will do well on the test.

> **Incorrect:** Some people would do well to mind their ps and qs.
> **Correct:** Some people would do well to mind their p's and q's.

Its, without the apostrophe, denotes the possessive. *It's* is a contraction of *it is* or *it has*.

> **Incorrect:** The dog chased it's tail.
> **Correct:** When the dog chases its tail, it's a funny sight to behold.

Other examples of the possessive:

> a month's notice (1 month is singular; hence, the apostrophe comes before the *s*)
> four months' notice (4 months is plural; hence, the apostrophe comes after the *s*)
> a day's pay
> four days' pay
> twenty years' experience

See AP style for more specific rules on using apostrophes for plurals and possessives.

4.2 COLONS

Colons tell readers that something further is coming. Use them to introduce lists or quoted text, or to denote emphasis.

When a colon is used within a sentence, the first word following the colon is lowercase unless it is a proper name.

> Three primary factors affected our ability to collect the data: the weather, the water level, and the number of beers we drank the night before.
>
> Only one thing interests my cat: sleeping.

When a colon introduces two or more sentences, introduces a speech in dialogue or an extract, or introduces a direct question, the first word following it is capitalized.

> The project manager had a problem: He had promised everyone a raise when they finished the task. The agency decided later that no raises would be awarded to anyone.

Colons are used to denote elapsed time (as in stopwatch readings) and time.

Colons fall outside of quotation marks unless they are part of the quotation itself (see entry on Quotation Marks).

4.3 COMMAS

Use the serial comma, that is, the comma immediately before a conjunction in a series of three or more items. (**Note:** This differs from AP style.)

> The field crew needed clipboards, GPS units, and measuring tapes.
> *But*: I had orange juice, toast, and ham and eggs for breakfast. (*Ham and eggs* in this case reads as a unit, so the punctuation is correct. It is also correct to omit the first *and* and put a comma after *ham*.)

Omit the serial comma when using an ampersand (&) in place of *and*. Reserve ampersands for titles, headers, etc., and avoid using them in text.

> The company Johnson, Melville & Anderson provides the best service. (ampersand necessary because it's part of a proper name)
>
> **No:** The report included sections on grammar, spelling & punctuation.
> **Go:** The report included sections on grammar, spelling, and punctuation.

Use commas to set off parenthetic (i.e., unnecessary to the phrase, asides) words, phrases, or clauses.

> The project manager, who was ready to walk out, decided to see the plan through.
>
> The style manual's success, the editor suggested, will depend on how useful it is for the staff.

Use a comma after the year in complete dates (month, day, year) within a sentence.

> The effects of the drought, from September 13, 1993, through June 12, 1994, lasted well beyond anyone's imagination.
>
> *But* The field season began in March 2008 and ended in mid-July 2009.
>
> The 10 February 2008 deadline passed.

Use a comma after the state in complete city-state references within a sentence.

> Helena, Montana, is where DEQ has its headquarters.

Use a comma to separate the thousands in figures larger than 999, unless the figures are addresses or dates. Convention has gravitated toward dropping the comma, but this can confuse readers in technical writing.

> Ravalli County has more than 1,200 streams.

Commas always fall within quotation marks (see entry on Quotation Marks below).

> Although she said I was "skating on thin ice," the boss agreed to my request for a raise.

In most cases use a comma before a conjunction that joins two independent clauses.

> We took our case to Washington, and our senator greeted us personally.
> *But* We took our case to Washington and had planned to see our senator.

The comma can be omitted if the subject is the same in both clauses and the clauses are short or otherwise related.

> I was tired and I went to bed.

Commas are used to set off introductory clauses but some styles omit them if the clauses are short (four or fewer words); however, DEQ style prefers the comma for introductory clauses regardless of length.

> During the 1990s, our research team uncovered many errors.
> In 2009, we generated fewer reports.
> When I first set out to create this style guide, I thought the job would be simple.

Use a comma in cases where ambiguity can result.

> She was glad she had looked, for a man was approaching the house.

Do not use commas to set off parentheses but do where a comma would normally follow an introductory clause.

Incorrect: Be sure to bring your field equipment, (measuring tape, flagging, compass), to the training session.
Correct: Be sure to bring your field equipment (measuring tape, flagging, compass) to the training session.

Incorrect: If it had not been for the quick-witted manager, (or her assistant), we would all be in trouble.
Correct: If it had not been for the quick-witted manager (or her assistant), we would all be in trouble.

4.4 EXCLAMATION POINTS

Use these sparingly, if at all, so readers don't think you are shouting at them… or that you're just super excited about writing your report!!! If you want your readers to be enthused—or appalled—try to evoke using words and ideas, not punctuation marks!!

Exclamation marks fall within quotations only if they are part of the quoted matter (see entry on Quotation Marks below).

4.5 HYPHENS

Hyphens help to reduce ambiguity. If two words together are used to describe a noun, and those words come immediately before the noun they describe, the first two words (called a compound modifier) are usually hyphenated. If absolutely no ambiguity exists without the hyphen, you can leave it out.

Section 4 reports on the status of Montana's water-related programs.
We took our child to the health care center for an exam. (Omitting the hyphen between *health* and *care* would not confuse a reader.)

When compound modifiers follow nouns, hyphens are unnecessary except when confusion could result following *to be* constructions.

The up-to-date report was comprehensive.
But The report was up to date. *Similarly* Keep me up to date on the report's status.

The field technician was little-known until she discovered gold in her water samples. (The hyphen is necessary to avoid confusing the reader that the field technician was relatively unknown rather than little in size.)

Use a hyphen at the end of all words in a list that would normally be hyphenated if standing alone. Use a space to separate words not part of that compound modifier.

Incorrect: Collecting waters samples is a one-to-two-person job. (*to* is not part of the modifier)
Correct: Collecting waters samples is a one- to two-person job.

Do not use hyphens to join adverbs that end in *ly* or words like *very*.

Incorrect: The quickly-running fox jumped over the brown dog.

Correct: The quickly running fox jumped over the brown dog.
But The publicly-disputed results made headlines. (*Publicly* is not an adverb. Incidentally, *publically* can also be spelled like that.)

Don't hyphenate chemicals, diseases, scientific terms, or plant and animal names when used as modifiers if their original forms are not hyphenated.

sulfur dioxide emissions
swine flu epidemic
apple tree grove

Our evolving English language tends to favor closing two words that have become part of popular speech, rather than hyphenating them (e.g., *e-mail* has become *email* and *data base* has become *database*). Incidentally, AP style still prefers *e-mail* and DEQ follows suit. AP has, however, caved to popular pressure as of April 2010 and now accepts *website* instead of *Web site*. DEQ follows suit (see entries in the section titled "Treatment of DEQ Terms and Other Commonly Used Words").

4.6 M-DASHES (EM) & N-DASHES (EN)

En and em dashes are so named because of their lengths: An en dash is the length of a typeset *N*; an em dash, a typeset *M*. They differ from hyphens.

<u>En Dashes</u>

The rules for en dashes can be complex and are not detailed in AP style but are detailed in Chicago style. For DEQ purposes, use an en dash with numbers (dates, figures) to signify *up to and including*. Additional rules follow.

Use an en dash, not a hyphen, with:

Figures with capital letters (I–90; 4–H Club)
Ranges and time spans (2006–2008; Monday–Friday; $38–$56; pp. 192–215)

But ACF-Brill Motors Co. (hyphen with capital letters and a word)
loran-C (hyphen with lowercase word and capital letter)
MiG-25 (hyphen with mixed letters with figure)

For the sake of parallel construction, do not use an en dash if using the words *from* or *between* to signify a range.

Incorrect: The holiday season is typically considered from December 24–January 1.
Correct: The holiday season is typically considered from December 24 to January 1.
Correct: The holiday season is typically considered December 24–January 1.

Though AP style leaves a space between en dashes, DEQ closes that space, as in the examples above (exception for lists given below).

When using en dashes in a list, leave the space open.

- Columbia – all Montana's waters west of the continental divide, including the Clark Fork, Flathead, and Kootenai rivers
- Upper Missouri – the Missouri River basin from its headwaters downstream to the confluence with the Marias River

In Microsoft Word the shortcut key for en dashes is Ctrl+Num - (where "Num –" is the dash on the number keypad on the right-hand side of the keyboard).

Em Dashes

Use an em dash to mark an aside or in place of commas or parentheses when a meaning is clarified or a list given. It can also be used to set off a final clause. Though AP style leaves a space between em dashes, DEQ closes that space, as in the examples below.

> If samples are taken—and indeed they should be—technicians must follow protocols.
>
> These are shore deposits—gravel, sand, and clay—but marine sediments underlie them.
>
> I must work 12 hours a day to make ends meet—alas!

In Microsoft Word the shortcut key for em dashes is Alt+Ctrl+Num - (where "Num –" is the dash on the number keypad on the right-hand side of the keyboard).

4.7 PERIODS

Use only one space, not two, between sentences that end with a period—or other closing punctuation marks. Using a single space between sentences also saves space, ink, and paper.

It is acceptable to close the space following a period in initials (e.g., Washington, D.C., not Washington, D. C.).

Use a period for abbreviations of single words. If the word is a unit of measure, however, omit the period.

> no. (number)
> fig. (figure)
> *But* lb (pound), yd (yard), mi (mile)

The period goes outside the closing parenthesis within a sentence. Use a period within the closing parenthesis if the parenthetical phrase is a complete sentence.

> We filed the report with the full results (see Fig. 8).
> We filed the report with the full results. (See Figure 8 for more details.)

Periods always fall within quotation marks (see entry on Quotation Marks below).

We decided to call the report “The Best of Montana’s Recreational Waters.”

4.8 QUOTATION MARKS

Use quotation marks when quoting others or brief passages in publications. For longer passages, separate the quoted material from the main text, below the main text, and indent.

Periods and commas go inside quotation marks—*always, always, always*. The British (and their Commonwealth cousins, including Canada) put all punctuation outside of the quotes in most cases. This is America, however, so ignore (with respect) our English brethren’s rules.

The manager referred me to the report “Water Quality Measurement Standards.”

To drive my point home, I included the words “incompetent,” “dyspeptic,” and “selfish” in his personnel evaluation.

Question marks and exclamation points go outside of quotation marks *unless* they are a part of the quoted material.

Who said, “A joke is a very serious thing”? (Winston Churchill, by the way.)
But The project manager said, “When will that report be finished?”

“Stop!” he yelled.
But I can’t believe he told me to “get a life”!

Colons go outside of quotation marks except when they are part of the quote itself.

Take, for example, the first line of “To a Skylark”: “Hail to thee, blithe spirit!”

Semicolons and dashes go outside of quotation marks unless they are part of the quoted matter.

The report’s sections are titled as follows: “Who Moved My Cheese?”; “Where Was it Moved To?”; and “Never Mind, I Don’t Want it After All.” (Commas could also be used in place of semicolons here, but they would have to be placed inside the quotes and following the question marks, which could get messy looking.)

Use single quotation marks for quotes within quotations.

She said, “I can’t believe he told me to ‘get a life’!”
But without exclamation She said, “I can’t believe he told me to ‘get a life.’”

Used for Emphasis, New Terms, Colloquial Terms

Use quotation marks sparingly for emphasis. Use quotes to indicate irony, introduce colloquial terms or phrases (first reference only), and to introduce new words (first reference only).

Avoid: This “independent evidence” may not cover all aspects of the beneficial use. (Quotes not necessary here unless indicating irony.)

> They called their field truck "Big Red." Able to climb steep tracks with no trouble, Big Red took the crew to some of the most difficult-to-reach places.
>
> A "hertz" is a unit of frequency defined as the number of cycles per second of a periodic phenomenon. The hertz is named after the German physicist Heinrich Hertz.

Used to Enclose Titles of Works

AP style uses quotation marks rather than italics to set off titles of all works. DEQ follows suit.

For more information on when to use italics, see the section titled General Grammar Usage.

4.9 SEMICOLONS

Use a semicolon to join two independent clauses when a comma isn't quite enough and a period is too much.

> A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty. (Churchill again)

Use a semicolon to join two independent clauses when the second clause begins with a conjunctive adverb (e.g., however, therefore, moreover, furthermore, thus, meanwhile, nonetheless, otherwise) or a transition (e.g., in fact, for example, that is, for instance, in addition, in other words, on the other hand, even so).

> I enjoy my job; however, I don't like sitting at a computer all day.
> I love my job; in fact, it's the best job I've ever had.

Use a semicolon to join elements of a series when each item in the series includes internal punctuation, such as commas.

> Olympic Games have been held in Beijing, China; Athens, Greece; Salt Lake City, Utah; Sydney, Australia; and Nagano, Japan.

Avoid using a semicolon when a period will do nicely.

4.10 PUNCTUATING BULLETED & NUMBERED LISTS

Because AP deals with news stories and limited space, their style is not explicit enough for report writing. Where it is explicit, their style is not *appropriate* for report writing. Instead, use Chicago style as follows:

Short lists of a few items can be included in the main body of text (this is called a "run-in" list). Below, note the use of parentheses in run-in lists. Lowercase letters may be substituted for numbers unless the numbers are important (see entry below).

> The report includes four sections: (1) an introduction, (2) arguments against grammar rules, (3) arguments in favor of grammar rules, and (4) a conclusion.

Run-in lists are punctuated in the same way as sentences. If the phrase in each number has internal commas, use a semicolon to separate each number in the list, rather than a comma.

> The report includes four sections: (1) an introduction; (2) grammar, usage, and spelling rules; (3) arguments for and against rules; and (4) a conclusion.

Longer lists should be set vertically, not run in. Use numerals for lists in which order is important (e.g., steps to performing a task or to suggest chronology or relative importance). Use bullets where numeral order is not important.

All list items, whether run in or set vertically, should be congruent; i.e., syntactically alike: noun forms or phrases or full sentences, etc.

Incongruent:	Category 1:	Waters for which all applicable beneficial uses have been assessed and all uses are determined to be fully supported.
	Category 2A:	Available data and/or information indicate that some, but not all of the beneficial uses are supported.
Congruent:	Category 1:	All beneficial uses are fully supported.
	Category 2A:	Some beneficial uses are supported.

4.11 VERTICALLY SET LISTS

Introduce the list with a complete sentence followed by a colon.

If the list is numbered, use a period after each number and capitalize the first letter (but see exception below).

For items that run more than a line, use hanging indents for the second and subsequent lines. Word automatically formats for bullets and numbers.

Do not use closing punctuation after each item unless the items are complete sentences. **Exception:** Items first introduced in text and consisting of phrases that would normally be punctuated if the list is part of the run inshould be punctuated as follows:

> The project manager reported that
>
> 1. a new committee will be established to study the needs;
> 2. the committee shall report their findings within 1 month;
> 3. if necessary, the findings will be published.

If bullets were used instead of numbers in the above example, the punctuation and capitalization would remain the same.

5.0 GENERAL SPELLING & COMMONLY MISUSED WORDS

ability/capacity Ability is the state of being able or the power to do something; capacity is the power of receiving or containing.

about/approximately About indicates a rough estimate; approximately indicates near accuracy.

acronyms Use a lowercase "s" to denote the plural form of an acronym.

RFPs
MP3s
JPEGs
but WQS (Water Quality Standards)

advise/inform Advise means to offer counsel; inform means to communicate information.

affect/effect *Affect* is usually a verb, while *effect* is a noun. As a verb, *effect* means to cause or to bring about, though it's more preferable to say accomplish, perform, produce, generate, or make.

Pollution affects the quality of drinking water.
Pollution's effects on water quality can be an enormous issue for municipalities.

alternate/alternative Alternate (noun) means to substitute; (verb means "to change"); alternative is a choice between two or more possibilities.

ampersands Use only when they are part of a formal name (e.g., C & O Railroad) or when space is at a premium.

anxious/eager When you are anxious, you are full of anxiety or worry; when you are eager, you are full of enthusiasm or desire. The former can make you sick to your stomach, while the latter can make you jump for joy.

because of/due to Because of means by reason of or on account of (The field work was postponed because of bad weather.); due to means attributable to (The field work went well due to the diligence of the team.)

beside/besides Beside means next to, by the side of; besides means in addition to.

between/among Use between when writing about two things and among when writing about three or more things.

big, large, great Use big for bulk, mass, weight, volume; use large to describe dimension, extent, quantity, capacity; use great to describe importance, excellence, superiority. (*but* greater than for comparison of quantity)

Bureau/bureau Capitalize only when referring specifically to your own bureau within DEQ and when no other DEQ bureaus are mentioned in the same report. Ex: the Water Protection Bureau can be referred

to in later reference as either WPB or the Bureau. In all non-specific references, or when referring to bureaus that are not part of DEQ, use lowercase.

center/middle Center is a point around which everything revolves; middle is an approximation and suggests a space rather than a point.

cleanup/clean up Cleanup is both a noun and adjective; clean up is a verb.

> The cleanup will take six weeks.
> Workers will clean up the site in six weeks.
> The cleanup work will take six weeks.

compose/comprise Compose means to assemble or constitute; comprise means to encompass (specifically encompass that which is already assembled). Things compose groups and groups comprise things.

> The project manager, field advisor, and ground crew compose the monitoring team.
> The monitoring team comprises a project manager, field advisor, and ground crew.
> The monitoring team is composed of a project manager, field advisor, and ground crew.

continuous/continual Continuous means uninterrupted; continual means frequently recurring.

convince/persuade Convince is to change someone's mind or overcome with proof; persuade is to plead or urge through argument. You can persuade someone to use the XYZ method without convincing her that it's the proper method to use.

criteria Criteria are developed and recommended by EPA. States may adopt EPA's criteria or develop and adopt their own criteria as narrative or numeric standards to protect beneficial uses. Criteria are also the result of the translation of a narrative water quality standard. (see narrative and numeric standards and water quality standards)

data Though typically a plural noun, data can take both a plural and singular verb or pronoun.

> The data is sound (used as a collective)
> The data have been carefully collected (means individual items)
> The data has been carefully collected (means a single collection of items)

datum As per Merriam-Webster, something given or admitted, especially as the basis for reasoning or inference. Use sparingly, if at all, as it's largely fallen out of fashion; however, datums are used when referencing GIS data.

dispose/dispose of To dispose means to arrange, incline, or make ready; to dispose of means to get rid of something.

> The on-scene coordinator is disposed to clean up the site now.
> The on-scene coordinator will dispose of the hazardous material at an approved landfill.
> Improper use: EPA will dispose the hazardous material.

effective/efficient A person or thing that performs its intended function is effective; but, if that person or thing wastes time, money, or effort in performing its function, it's not very efficient.

ensure/insure/assure Ensure means to make sure of something; insure means to take out an insurance policy; assure means to inform confidently.

> I will ensure whether you are entitled to receive benefits. You should be since you were insured. Whatever the case, I assure you that I will follow up on this matter.

e.g. / i.e. e.g. means "for example" (*exempli gratia*); i.e. means "that is" (*id est*); they cannot be interchanged. Both are always followed by a comma.

entitled/titled Persons are entitled to privileges, while books and other works of art/productions are titled with a name. The corruption of the word "entitled" has been so great that most dictionaries now accept "entitled" to mean "the title of." Note, however, that *en* is redundant (likewise is *encircled* when simply *circled* will do). Save ink and use "titled" when referring to the name of a piece of work.

Federal/federal Usually only capitalized when part of a proper noun (the Federal Register) but not in constructions such as federal government.

fewer/less In general fewer is used for individual items, while less is used for bulk, quantity, or matters of degree. Less modifies collective nouns, mass nouns, and nouns denoting an abstract whole. "More than" is the opposite of both, however.

> The more you pester the project manager, the less respect she'll have for you.
> I have less than $20 in my wallet. *But* I have fewer than 20 one dollar bills.

Avoid redundancy and never use "fewer in number" or "fewer number of people."

finalize Avoid in favor of stating what actually has to take place to complete that which you would like to make final. Use *complete* or another term. (see use/utilize, prioritize)

> **No:** The contract will be finalized soon.
> **Go:** The contract will be complete once all parties have signed it.

further/farther Use further when referring to matters that are not physically measurable; use farther when referring to physical distances.

good/well Good pertains to a thing, including a condition or state of being. Well pertains to an action. When your fingers are warm, they feel good, but if they are sensitive, they feel well.

> The wildlife biologist is a good person. She did well on her data collection project.

figuratively/literally/virtually Figuratively means like, similar, resembling; literally means exactly the same as stated; virtually means approximating reality. Do not use "literally" unless you mean that a statement is exactly as it was stated.

hopefully The bane of every picky editor's existence, this word is so commonly misused that its proper meaning is largely unknown to most.

> **Never:** Hopefully, the results will be in soon. (this means the results are full of hope)
> **Always:** We hope the results will be in soon. *Or* DEQ hopes…or similar.

impact As a verb it is over-used and means to drive or press closely into something. Use *affect* and variants instead.

> The contamination will affect a large area instead of the contamination will impact a large area.
> The results had an effect on the way we will collect water samples in the future. (*not* impacted the way we will collect)

Internet A proper noun that must be capitalized. (see Web)

Irregardless It's not a word. Even your spell checker knows that. Use *regardless*.

like/as Like means similar to; as means in the same way that.

may/might/can May means permission or free choice, as well as expressing something that is possible, factual, or could be factual; it is not interchangeable with might (uncertain, contrary, hypothetical), can (the state of being able), could (conditional, uncertain), or would.

> You may examine the results if you like. You might find that they are contradictory.
> I may have left my equipment in the field but I can't remember.

narrative and numeric standards Narrative and numeric standards are criteria that Montana has adopted as standards**.** (see criteria)

online One word, not hyphenated.

> The reports can be found online.
> Go online to register and make comments.

over/more than Over is a preposition and refers to position; more than refers to a quantity that is greater than.

> **Incorrect:** There are over 300 lakes in Montana.
> **Correct:** There are more than 300 lakes in Montana.

percent/percentage Percent is per a hundred; percentage is a proportion in relation to a whole.

practicable/practical Practicable means capable of being put into practice; practical describes that which can be done.

principal/principle Principal (noun) means head of school, main participant, or sum of money; principal (adjective) means first or highest in rank, worth, or importance. Principle is a fundamental law or basic truth.

prioritize Show your colleagues how smart you really are and use "make priorities" instead. Everyone knows that only posers add "-ize" to the end of words, thinking it makes them sound erudite.

Region/region Capitalize when referring to a specific regional office of a state or federal agency. Do not capitalize if referring to a geographic region.

> The Region 1 headquarters of the U.S. Forest Service are located in Missoula.
> The New England region was hit with heavy snow.

section, article Section is not capitalized when referring to one part of a law or regulation (see *title*), nor is article. Section is capitalized when referring to report sections in text.

> DEQ interprets section 303(d) to mean we must be in compliance or risk getting fined.

should/will Should implies ought to; will suggests intention.

strategize See "prioritize. Use *devise strategies* instead.

that/this (those/these) For better clarity use *that* to indicate something already mentioned and *this* to refer to something yet to come. Your audience has a better chance of getting your meaning.

> Montana's natural resources need conserving. That is the reason I volunteer.
> This is the reason I volunteer: Montana's natural resources need conserving.

that/which That tells something about a subject specific and necessary to the meaning of a phrase; which tells something about the subject that is not absolutely necessary. The "which" clause is always set off by commas; "that" never is.

> The project, which is six weeks overdue, is still with the contractor. (the project happens to be 6 weeks overdue but that is not important in this sentence.)
>
> Let's review the project that is six weeks overdue. (as opposed to the project that is running on time)

title Capitalized when referring to a part of a law or regulation; not capitalized otherwise.

> DEQ interprets Title 41 to include all Montana residents.

tribal, tribes Capitalize when referring to the full name of an American Indian nation; lowercase when used alone and in plural form. Lowercase the adjectives *tribal* and *native* unless they are part of a proper name. Native Americans, American Indians, Indian Country, and Alaskan Native Villages should be capitalized.

> the Sioux and Navajo tribes
> the Blackfeet Indian Tribe *but* the tribal lands border Glacier.

use/utilize and friends Why oh why do we say *utilize* when *use* will do nicely? Save ink and paper by choosing this user-friendly, three-letter, easy-to-read-and-spell, single-syllable word.

waste The term is inherently plural and no added "s" is necessary except when distinguishing between different kinds of waste.

> Hospital waste comprises various dangerous items.
> Solid and liquid wastes must be treated differently.

water quality standards Water quality standards include designated beneficial uses, criteria adopted by the board to protect those uses, and a nondegradation policy**.** (see narrative and numeric standards)

Web Capitalize when referring to the World Wide Web.

website et al. AP style has relented to popularity and now uses "website" (not Web site). Similarly, webcam, webcast, webinar, and webmaster are single, lowercase words.

6.0 NUMBERS, UNITS OF MEASURE, SIGNS & SYMBOLS

6.1 GENERAL RULES

Write out whole numbers below 10 (including *zero*, not 0) and use figures for numbers 10 and higher. Write out numbers that begin sentences.

> Twelve program officers and 11 regional officers think grammar and spelling rules are a pain in the wazoo.

Exceptions: Always use numerals for:

- units of measure (feet, miles, inches, pounds, etc.)
- page numbers
- money
- proportions
- dates
- time
- age

> October 27, 2010
> $5 (not $5.00); $0.75 or 75 cents
> 8 pounds
> 1 yard
> 24 hours
> 50%
> 6 p.m. (not 6:00 p.m.); 12:58 p.m. is written 2358 in military time
> 100:1 (but 100-to-1 chance)
> Page 2
> 10 years old (but 10-year-old management plan)

When two or more numbers appear in the same sentence, and at least one of them is 10 or higher, use numerals for all numbers in that sentence. But if none of the numbers is higher than 10, write out all the numbers.

> The field crew needed 15 clipboards, 10 GPS units, 4 measuring tapes, and 1 case of beer.
> The field crew needed nine clipboards, eight GPS units, four measuring tapes, and one case of beer.
> A team of four women ran the 1-mile relay in 3 minutes 20 seconds.
> The contractor, three engineers, and one surveyor inspected the 3-mile road. (numeral “3” because it’s a unit of measure)

Hyphenate compound numbers from twenty-one to ninety-nine (when used to start a sentence) and in compound adjectives.

> Twenty-one rivers were sampled, and all 21 were severely polluted.
> The 7-year-old management plan was out of date.

Do not hyphenate modifiers with a possessive noun.

1 week's pay
2 hours' work
1 minute's delay (but *a 1-minute delay*)

Hyphenate a unit modifier following, but referring back to, the modified word(s) and use the singular.

motor, alternating-current, 3-phase, 60-cycle, 115-volt
glass jars: 5-gallon, 2-gallon, 1-quart
belts: 1 1/4-inch, 1/2-inch, 1/4-inch, 2-inch

Write out large numbers in a way that your audience will most easily grasp.

12 million not 12,000,000
$2,750 million not 2,750,000,000 dollars
1½ million, not a million and a half

However, take care with figures if your audience extends beyond Americans. In the States, *billion* means a thousand million. In some European countries, *billion* means a million million. (**Note:** Great Britain has now adopted the American way.) For international audiences, it's best to use figures for numbers in the millions and higher.

Write out one of the numbers (usually the shorter one) when two appear consecutively in a phrase but never write out years. Write out the first number when it modifies a unit of measure, even if that number is shorter in written form.

The plan called for 52 two-part training modules over the course of 3 years.
In 2006 seventy-five streams were monitored.
The technician used ten 3-inch pipes. (contrary to AP style, which says *10 three-inch pipes* or *four four-bedroom houses*)

Use superscripts for mathematical notations but not for ordinals.

10^2x11^9
12th in line; 1st to arrive
2nd to the last

Although it's commonly accepted practice to omit the comma with numbers in the thousands, a comma is preferred for clarity.

1,000 not 1000 (unless you mean the year 1000)

Note: European countries and Canada often use a comma for the decimal point. Take care not to confuse when writing for a foreign audience.

Use numerals for serial numbers. Note the capitals in the last two examples; all sections, chapters, figures, tables, etc. should be capitalized but not lesser terms, such as pages, lines, paragraphs.

pages 352-357
lines 5 and 6
paragraph 1
Chapter 2
Section 7.5.1

6.2 UNITS OF MEASURE

Avoid using abbreviations or symbols in text for basic units of measure involving a single quantity (length, distance, time, height, pounds). Instead write them out. Within tables, graphs, and charts, the abbreviation is acceptable but put a space between the unit and the numeral, unless trying to save space.

3 inches (not *3 in* or *3in*)

Abbreviations are acceptable for derived units of measure (acquired by multiplying/dividing, such as miles per hour, parts per million, square feet).

32 mph
52 lb/in^2
96 ppm

See the entry below under SI style guidelines for more details.

6.3 YEARS & DATES

When contracted, fiscal year, consecutive years, or a continuous period of 2 years or more are written like so, and are joined by an en dash, not a hyphen (see entry on dashes in the section titled General Punctuation & Treatment of Words):

1989–92
1998–99
1998–2001 (change of century)
2001–3
2000–2001 (not *2000–01* to avoid multiple ciphers together)
FY 2010 or FY10

If the *from* precedes the year, or the word *inclusive* follows it, the second year is not shortened and the word *to* is used (not a dash)

from 2005 to 2007 (not *from 2005–7*)
2005 to 2007, inclusive (not *2005–2007 inclusive*)

Dates should be written thusly:

December 7, 1941, is a day that will live in infamy. *But*: On December 7 Peal Harbor was bombed. (comma always follows a year with complete dates)

The team will celebrate in December 2010 when they complete their 3-month project. (no comma after the year in incomplete dates)

Additionally, pay attention to the use of commas with ordinals, and avoid using ordinals in dates except when writing *the/of* constructions.

Correct: October 27, 2010
Incorrect: October 27th, 2010

Correct: the 27th of October 2010
Incorrect: the 27th of October, 2010

Preferred: We will finish on October 27.
Not Preferred: We will finish on October 27th.

6.4 DECIMALS & FRACTIONS

Decimals and fractions are more easily understood when written with numerals instead of words.

3/5 or 0.6, *not* three-fifths
1.36, *not* one point three six

Decimals are preferred for figures that convert cleanly, while fractions are best used with figures that do not convert cleanly. Your choice will depend on the necessity of precision required in your text (see next entry).

1/3 is precise; 0.34 is slightly more than 1/3; 0.3333 is awkward
.25 is exactly 1/4

However, *do not* use fractions or decimals in cases of approximation. Instead, write out the number.

1/4 mile [or 0.25 mile] down the road (implies that it is accurately [or precisely] that distance)
one-quarter mile down the road (implies an approximation)

Use a cipher (0) before a decimal point without a whole unit. Omit the cipher after a decimal point unless the figure is an exact measurement. All figures less than 1 have singular units.

0.25 inch (*but* .30 caliber)
0.5 inch (not *inches*)
0.58 cubic foot (not *feet*)
1.25 inches

Fractions standing alone, or if followed by *of a* or *of an*, are generally spelled out.

I've heard that three-fifths of all water quality specialists are brilliant.
We will need at least one-half of an acre to set up camp.

Use fractions or decimals for modifiers or when writing out the words appears cumbersome. Close the space between the whole number and the fraction when using numerals.

½-inch pipe (*not* half-inch pipe)
3½ times the amount *or* 3.5 times the amount (*not* three and one-half times the amount)
3½ (*not* 3 ½)

6.5 ORDINAL NUMBERS

When ordinals appear in the same phrase, and one of them is 10th or more, use figures for all.

This legislation was passed in the 1st session of the 102nd Congress.
He represented the first, third, and fourth regions.
but The report was the sixth in a series of 14. (see next entry)

Ordinals and numerals appearing in the same sentence are treated according to the separate rules dealing with ordinals and numerals standing alone or in a group.

The fourth group contained three items.
The fourth group contained 12 items.
The 8th and 10th groups contained three and four items, respectively.
The eighth and ninth groups contained 9 and 12 items, respectively.

Beginning with 10th, use figures for numbered streets, avenues, etc.

First Street NW
13th Street
810 12th Street

6.6 IF NUMBERS ARE WRITTEN OUT

Do not repeat a written-out number in figures (e.g., She had five [5] reports to write.) except in legal documents. In such cases, follow these rules:

five (5) dollars, *not* five dollars (5)
ten dollars ($10), *not* ten ($10) dollars
but She had five reports to write.

If spelled out, whole numbers should be set in the following form:

two thousand twenty, *not* two thousand and twenty
one thousand eight hundred fifty, *not* one thousand eight hundred and fifty
eighteen hundred fifty, *not* eighteen hundred and fifty

However, if spelled out, any number containing a fraction, or piece of a whole, should use the word *and* for the fraction or piece:

sixty-two dollars and four cents

ninety-nine and three-tenths degrees
thirty-three and seventy-five one-hundredths shares

6.7 SIGNS & SYMBOLS

In general, and for clarity, use as few symbols as possible and stick to symbols more commonly known to your audience. Unless you clearly define them upon first reference, and use that symbol to represent that specific word throughout your text, avoid using symbols that have different meanings in different disciplines (e.g., T can mean *temperature*, *Tesla*, and *tera*). Instead, write out the word to avoid confusion.

Use °F and close the figure with the symbol. If Celsius must be used, put it in parentheses after the Fahrenheit reference. Consult with the project manager about whether or not to use metrics.

32°F (0°C)
but from 32 °F to 45 °F (space between figure and °F when listing a range of temperatures);
also correct: 32 °F – 45 °F

Use the symbol % instead of *percent* and close the gap with the figure.

3% (*not* 3 percent *or* 3 %)

Use µ for microgram (no italics)

Refer to the GPO Style Manual section titled Signs & Symbols for more detailed usage rules.

6.8 INTERNATIONAL SYSTEM OF UNITS (SI) STYLE GUIDELINES

Use a period after abbreviated units only when they end a sentence.

Incorrect: The stream is 75 ft. from the road.
Correct: The stream is 75 ft from the road. The distance is 75 ft. (Better yet, write out “feet.”)

Use standard unit symbols, prefix symbols, unit names, and prefix names; avoid sec, cc, mps.

s for second (not sec); cm3 for cubic centimeter (not cc); m/s for meter per second (not mps)

Write unit symbols in roman (straight) type. Write variables and quantity symbols in italics (m for meters vs. *m* for mass or s for seconds vs. *s* for displacement). Superscripts and subscripts are in italic type if they represent variables, quantities, or running numbers; they are in roman type if they are descriptive. These rules apply independent of the font used for surrounding text.

For more information on when to use italics or roman typeface, refer to the National Institute of Standards and Technology’s (NIST) “Typefaces for Symbols in Scientific Manuscripts” (http://physics.nist.gov/cuu/pdf/typefaces.pdf).

No “s” is necessary to make a plural for a unit symbol.

Incorrect: *l* = 75 cms
Correct: *l* = 75 cm

Symbols for units are written in lowercase, except for symbols derived from the name of a person. For example, the unit of pressure is named after Blaise Pascal, so its symbol is written "Pa," whereas the unit itself is written "pascal." **The one exception** is *liter*, whose original symbol "l" resembles the numeral 1 or sometimes the uppercase letter "I" (depending on the typeface used). NIST recommends that "L" be used instead.

Put a space between the numerical value and unit symbol, unless when the value is used in an adjectival sense. **Exceptions:** superscript units for plane angle, the degree symbol, and % symbol are all closed with their corresponding numerals.

Incorrect: a 25 kg sphere; an angle of 2 ° 3 ′ 4 ″
Correct: a 25-kg sphere; an angle of 2° 3′ 4″

Use the unit symbol following each numeric value to avoid confusion.

Incorrect: 35 x 48 cm
1 MHz-10 MHz or 1 to 10 MHz
20 °C-30 °C or 20 to 30 °C
123 ± 2 g
70 ± 5 %
240 V ± 10 % (one cannot add 240 V and 10 %)

Correct: 35 cm x 48 cm
1 MHz to 10 MHz or (1 to 10) MHz
20 °C to 30 °C or (20 to 30) °C
123 g ± 2 g or (123 ± 2) g
70 % ± 5 % or (70 ± 5) %
240 x (1 ± 10 %) V

When writing dimensionless quantities, the terms ppm (parts per million), ppb (parts per billion), and ppt (parts per trillion) are recognized as country-dependent terms, since their values vary among countries. SI, therefore, recommends avoiding these terms when writing for an international audience. Instead, use numerals and symbols.

2.0 µL/L; 2.0 x 10^{-6} *V*
4.3 nm/m; 4.3 x 10^{-9} *l*
7 ps/s; 7 x 10^{-12} *t*

(where *V*, *l*, and *t* are volume, length, and time)

For more information on style and convention, refer to the SI checklist (http://physics.nist.gov/cuu/Units/checklist.html).

For more information, refer to the National Institute of Standards and Technology's (NIST) briefing on SI (http://physics.nist.gov/cuu/Units/index.html).

7.0 GENERAL WRITING TIPS

Many of these tips are paraphrased from the EPA's Communications Style Book online and *The Elements of Technical Writing* (both found in the Reference Guide section). These tips are universal in good English writing, whether your prose is technical or not.

TIP 1: Know your audience and writing goals.

Before writing anything, have a clear answer to each of the following questions:

1. What do you want to communicate?
    a. What is your goal in communicating the info?
    b. What do you want to accomplish via this communication?
    c. List in order of priority the most salient points, if applicable.
2. Who is your audience? Define all potential members.
    a. What is their comprehension level of the materials presented? Write to the lowest common denominator.
    b. What does your audience want, or need, to know?
3. What is the best format? (report, brochure, fact sheet, etc.); often based on the salient points and audience, sometimes the deadline.
4. What is your distribution plan? How will your audience get the material?
5. Who should be involved in the project?
6. What is the deadline?

TIP 2: Use the most effective style and tone to match your goals.

In nonfiction writing, style is either formal (academic), informal, or journalistic. Tone reflects attitude toward the subject matter and the audience. Tone must be appropriate for both the content and the style.

Fact sheets and other educational materials for the general public should be written in a more informal style with a breezier tone.

In technical writing (e.g., DEQ reports), the style is utilitarian; it reflects accuracy more than anything else. Tone is always objective (or neutral). However, just because it's academic doesn't mean you have to use multi-syllabic words and long sentences. It's okay to infuse technical writing with a more informal tone.

According to *The Elements of Technical Writing*, "[A] more relaxed, conversational style *can* add conviction, readability, and vigor to your work."

TIP 3: Use the active voice as much as possible.

The active voice not only makes writing more vigorous, it simplifies prose by eliminating unnecessary words. The passive voice is okay in many instances; however, use it sparingly.

TIP 4: Clarity is king.

You may have learned that good writing uses fewer sentences (or fewer words). Unfortunately, technical writers tend to cram more words into sentences, using long noun strings that make readers work too hard to understand. Clarity trumps brevity *every time*. If you must write three sentences to get the point across instead of two, or use more words to explain something, do it. Consider which of the following sounds better to you:

> Montana's surface water use classification system
> Montana's system for classifying the use of surface waters

At the same time, concise writing is always best. Often, if you clearly state what you mean, your writing will naturally be concise.

TIP 5: Avoid ambiguity; use plain rather than complex or elegant language.

Say what you mean and keep the prose simple. Delete unnecessary information, words, and phrases that don't add meaning to your writing. The DEQ example below is vague and can be shortened for clarity:

> Using a targeted design, DEQ has been working for nearly 20 years to locate and characterize wadeable streams that have little or no human disturbance. Some work was completed in the early 1990s and involved collecting water quality and biological data at stream sites considered by regional land managers to be minimally disturbed. In 2000 this project re-initiated and continues with refined and more rigorous screening methods compared to the earlier undertaking.

What is a "targeted design"? Does "re-initiated" mean started the whole project over from scratch, collecting new data at old sites? Or does it mean *continued* the project, sampling streams that hadn't been sampled in the previous work? What exactly does "characterize" mean?

Let's try again:

> In the early 1990s, DEQ initiated a project to define the water quality and biological characteristics of minimally disturbed streams. Wadeable streams were targeted, and a network of monitoring locations was established on sites that land managers had deemed minimally disturbed by humans. Water column and biological samples were collected, as well as field parameters of water quality. In 2000, DEQ began a second phase of the study, using more refined and rigorous screening methods than during the 1990s' project.

The above version is much better but "field parameters" is still vague. Readers might want to know what field parameters the writer refers to. Also, could one of the "minimally disturbed" references be replaced with "undisturbed"? These are the details you should be looking for when revising documents.

TIP 6: Use positive statements wherever possible.

Positive statements are easier to understand; e.g. “Do not close the valve.” vs. “Leave the valve open.” The words “do not” make the reader’s brain stop (*wait, what am I* not *supposed to do?*). Also, people respond more favorably to positive statements.

TIP 7: Break up the monotony by mixing long and short sentences.

Vary the sentence length but aim for short ones. When long sentences are necessary, insert shorter ones before and after them to give readers a break. Varying sentence length also promotes comprehension and keeps readers engaged. If you practice writing short sentences, it will help you make them succinct.

TIP 8: Avoid clichés and jargon.

Clichés have become meaningless by overuse. Admit it, you want to roll your eyes every time you hear “think outside the box.” If you’ve heard the word or phrase a million times, don’t use it. Instead, say exactly what you mean (e.g., use “roughly” instead of “ballpark figure”).

Cliché’s ugly stepsister is jargon. Here is what the EPA says about jargon in their Communications Stylebook:

> It includes techno-talk, shop-talk, and random, stylized forms of bad grammar. Maybe the worst is jargon compounded with pretentiousness. The idea behind most jargon is that it is a code through which one communicates with the secret clan of people who “talk that way.” At best, this is a dubious proposition; but, even if true, it is no more effective than plain language because people “talk that way” too.

TIP 9: Repeat if necessary but don’t be redundant.

Repetition is an effective communication tool in teaching. Use it to remind readers of what is most important or to recall an idea from a previous section in a report. Redundancy is unnecessary repetition. Many commonly used phrases are redundant. Watch out for these:

Redundant	**Use Instead**
absolutely essential	essential
adding together	adding
continue on	continue
first and foremost	first
cancel out	cancel
current status	status
point in time	time
in close proximity	close
goals and objectives	goals (or objectives)
final outcome	outcome

TIP 10: Revise, edit, edit, revise.

Not even the best writers say it perfectly the first time. All writing requires revision, followed by careful editing. The former is the writer's job, while the latter should be done by someone else. You can save a lot of time by writing reports in simple prose from the start. Don't try to make it sound pretty or fancy or perfect for the first draft. Write as if writing to friend.

Some writers edit as they write. Break the habit! Just get it down on paper first then mop up during your revision, abiding by the other nine tips above.

Just for Fun: The Gunning Fog Index

If you want an estimate of the readability of your writing, use the Gunning Fog Index. The index roughly estimates the level of education required for someone to understand the text on a first reading. For example, a fog index of 12 is the reading level of a high school senior.

If your writing will be read by the general public, the fog index should be between 8 and 12, with the lower end of the scale more suited to an 8th-grade level of comprehension. If your writing must be accessible to every level of comprehension, shoot for an index of 6 or less.

How to determine the fog index:

1. Take a passage of about 100 words.
2. Find the average sentence length (number of words divided by the number of sentences).
3. Count the "complex" words; i.e., those with three or more syllables, but don't include proper nouns, familiar jargon, compound words, or common suffixes such as -es, -ed, or -ing as a syllable.
4. Add the average sentence length and the percentage of complex words.
5. Multiply the result by 0.4 and don't round.

$$0.4\left(\left(\frac{\text{words}}{\text{sentence}}\right)+100\left(\frac{\text{complex words}}{\text{words}}\right)\right)$$

This is a just a guide. Some multi-syllabic words are not considered difficult to understand, yet according to this formula, they should be counted; e.g., "asparagus" has four syllables but it isn't a complex word.

8.0 USEFUL REFERENCES

The following resources will be most helpful for report writing projects. Some of the examples used throughout this style guide were borrowed from these resources.

1. Associated Press Stylebook
(http://www.apstylebook.com/)
DEQ's official style resource. New versions are issued frequently; the online version is updated more frequently. Where AP style is not explicit enough for DEQ's needs, refer to the Chicago Manual of Style. DEQ departs from AP style in a few ways, which are noted throughout this DEQ guide.

2. Chicago Manual of Style, 16th Edition
(http://www.chicagomanualofstyle.org/home.html)
More comprehensive than AP. Refer to for detailed rules not explicitly handled by AP.

3. The Elements of Style, by William Strunk Jr. & E.B. White
A classic guide, succinct and clear, used for decades and praised by writers and editors everywhere. Highly recommended reading.

4. The Elements of Technical Writing, by Gary Blake & Robert W. Bly.
An excellent, highly recommended, easy-to-read resource for anyone who writes or edit reports. Some features: (1) simple rules for tight, clear writing; (2) a list of jargon and redundant phrases to avoid; and (3) how to use numbers, units of measure, equations, and symbols.

5. EPA Communications Style Book (http://www.epa.gov/productreview/stylebook/writing.html)
An excellent online resource—and free! Offers guides to grammar, punctuation, usage, and more. Some styles may differ from DEQ's style but a good guide for quick, online reference.

6. General Printing Office (GPO) Style Manual
(http://www.gpoaccess.gov/stylemanual/browse.html)
An excellent online resource—and free! Offers guides to grammar, punctuation, usage, and more. Some styles may differ from DEQ's style but a good guide for quick, online reference.

7. The Plain Language Action and Information Network (PLAIN)
(http://www.plainlanguage.gov/)
Ironic or not, federal government employees from different agencies and with different specialties formed PLAIN to support the use of clear communication in government writing.

8. Merriam-Webster's Collegiate Dictionary, 11th Ed.
DEQ's current in-house dictionary.

9. See the International Code of Botanical Nomenclature (http://ibot.sav.sk/icbn/main.htm) and the International Code of Zoological Nomenclature (http://www.nhm.ac.uk/hosted-sites/iczn/code/) for details on proper scientific nomenclature for plants and animals.